

### **Functions at different levels of ISD access**

Function	ISD Free	ISD Subscription	ISD work-for-others
Access to data	Search by species, date, geography, serotype; download in fasta format	Search by species, date, geography, serotype; download in fasta format	Search by species, date, geography, serotype; download in fasta format
Data contents	All Genbank influenza-specific sequences; additional sequences deposited directly to ISD, including current vaccine strains from CDC	All Genbank influenza-specific sequences; additional sequences deposited directly to ISD, including current vaccine strains from CDC	All Genbank influenza-specific sequences; additional sequences deposited directly to ISD, including current vaccine strains from CDC
Data curation	Stringent: aligned (for accuracy); BLAST (for serotype and segment); expert oversight <sup>1</sup>	Stringent: aligned (for accuracy); BLAST (for serotype and segment); expert oversight <sup>1</sup>	Stringent: aligned (for accuracy); BLAST (for serotype and segment); expert oversight <sup>1</sup>

BLAST	Not available	Link to BLAST search provided in each record	Link to BLAST search provided in each record; BLAST against data in private compartments also possible
Alignments	Unavailable	Pre-aligned and curated; unlimited size; flip between nt and AA display, using multiple reading frames when appropriate; options for excerpting regions of alignments; options for color-coding functional motifs (eg, glycosylation sites); possible download in FASTA, MSF, Nexus and MS RTF formats; label options (strain name/accession number)	Pre-aligned and curated; unlimited size; flip between nt and AA display, using multiple reading frames when appropriate; options for excerpting regions of alignments; options for color-coding functional motifs (eg, glycosylation sites); possible download in FASTA, MSF, Nexus and MS RTF formats; label options (strain name/accession number)
Phylogenetic trees	Unavailable	Phylogenies in pdf or Newick form; label tips by accession number or strain name; option for inference from third-codon position only.	Phylogenies in pdf or Newick form; label tips by accession number or strain name; option for inference from third-codon position only.
Working set	Not available	One allowed.	Multiple allowed.
Genome browser	Not available	Available; search by species, date, geography, serotype; segment-specific links provided for downloading alignments tree inference.	Available; search by species, date, geography, serotype; segment-specific links provided for downloading alignments tree inference.
Accession number – strain name translation	Not available	Translate Flu tool allows translation from accession number to full or abbreviated strain name in any text file, including Newick tree files and alignments.	Translate Flu tool allows translation from accession number to full or abbreviated strain name in any text file, including Newick tree files and alignments.
Structure mapping	Not available	Not available	At least one key crystal

<sup>1</sup> ISD curation has identified errors in NCBI database.

			structure of all types available in PDB accessible for mapping locations of amino acid changes. <sup>2</sup>
Private compartment	Not available	Not available	Available. Can be used for secure storage of private data; can be customized to users' needs, eg, by addition of DB fields and analysis tools.
Secure sharing of private data	Not available	Not available	Available; user controls sharing

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<sup>2</sup> Available beginning September 2005